6 September 1972

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SUBJECT:

Application of New Analytical Techniques to Intelligence Production

- 1. This memo is intended to help sharpen our thinking on what may or should be done to introduce new analytical techniques into the production process.
- 2. As I see it, the present situation has the following elements:
  - a. The intelligence community lags the scientific and business world considerably in the application of the information sciences to the interpretation of data. (One can argue that the situation should be reversed if the community is to retain creditibility as the best authority in the interpretation of world events.)
  - b. The intelligence community has made an effort to introduce new techniques into the production process, but very little progress has been made. (In CIA, for example, there seems to be no on-line production effort using new analytical techniques as opposed to using computers as data banks, which some offices do.) The effort to introduce new techniques has largely been via training programs for analysts and managers. I cannot prove it, but it seems that in CIA, for example, 30-40 percent of all analysts and at least middle-level managers have had some exposure to the new theories. According to the training people I have talked to, they go away enthused but there the process seems to end.
  - c. It appears to me that the failure to use the new information handling techniques stems from some combination of the following:
    - (1) A disbelief on the part of managers (and analysts in some cases) that the new techniques are applicable to their problems.

- (2) An unwillingness on the part of managers to devote the time and resources to testing the new techniques in actual practice.
- (3) A belief that use of the new techniques would result in a product incomprehensible to the users of finished intelligence.
- d. There appear to be several ways in which the use of the new techniques will grow or can be made to grow:
  - (1) With the passage of time the old managers will fade out and the new generation of analysts, more innovative and better trained, will take over as managers of the analytical process;
  - (2) In time more analysts will go to places like CIA's Information Science Center for specific help in solving their analytical problems and the new techniques will thus seep into the production shops; or
  - (3) Because both of the above will take years to have a substantial impact on our way of doing business, PRG can seek ways to accelerate the process.
- 3. If PRG tries to accelerate the process, we have to recognize the following factors:
  - a. Personnel now available to teach and apply the new techniques are woefully lacking in numbers.
  - b. Any effort to introduce, or even test, the applicability of new techniques is unlikely to receive much high level support. Most unlikely of all is the proposition that the DCI would be willing, in the near future, to sponsor any community-wide effort at mass introduction of the new techniques.
  - c. Widespread application of the new techniques will only follow demonstrated success in their use on representative problems.
- 4. The above suggests that PRG's role should be along the following lines:
  - a. First, select a live, on-going, active intelligence problem for attack by the new techniques;

- b. Then form a group of substantive analysts and information science experts to work together to see how well theory works in practice. The group would use the same flow of intelligence as used in the regular substantive shops and would be charged with writing the same types of intelligence reports. Such reports would be for comparative purposes only at least at first.
- c. The effort should run sufficiently long to determine whether the results are persuasive in terms of finished intelligence, and whether lessons can be learned as to which techniques are promising and which are not. In effect, the effort would be both experimental and developmental.
- 5. As far as resources are concerned, we would seem to have the following possible ties:
  - a. For substantive experts we might be able to get some of the five men assigned by Proctor to shop.

b. For information science experts, we might be able to get one or two instructors from the Information Science Center. Another possibility would be to contract somebody

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- 6. As far as organization is concerned, I would suggest the following:
  - a. Put the project under PRG, but with PRG acting as objective evaluator of the exercise, not as a partisan;
  - b. Try to get Bill Colby actively involved so that there will be publicity and interest in CIA;
  - c. If the experiment succeeds, the DCI will be in a position to recommend further application in CIA and the other USIB agencies.
- 7. While the above are my ideas only and might not be the best, I strongly urge that we jointly think through how we are to get over the formidable obstacles which now prevent a practical test of the applicability of the new ideas to intelligence production. In my view only demonstrated publicized test with discernible success will overcome the inertia of the old ways of producing intelligence.

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